

## METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE

### ABSTRACT OF THE DISCLOSURE

5           In a method of manufacturing a semiconductor device, a tungsten layer pattern having  
an oxidized surface is formed on a substrate. A source gas including silicon is provided to  
the oxidized surface of the tungsten layer pattern to form a protecting layer on the oxidized  
surface of the tungsten layer pattern. The protecting layer prevents an abnormal growth of  
oxide contained in the oxidized surface. The protecting layer prevents a whisker from  
10   growing from the oxidized surface of the tungsten layer pattern.